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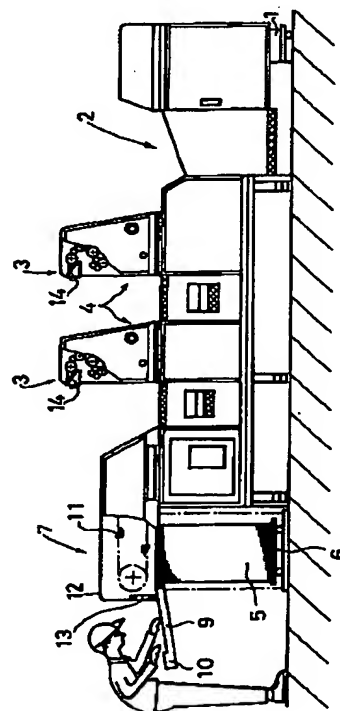
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(54) 【発明の名称】 枚葉式印刷機

(57) 【要約】

【目的】 群管理される枚葉式印刷機のインキ供給量の最終的微調整を各個の印刷機において簡便に行えるようにする。

【構成】 群管理される枚葉式印刷機において、起倒自在な操作ボード(9)を排紙部(7)に設け、この操作ボード(9)にインキ供給量調整手段(10)を設けたことを特徴とする。



【特許請求の範囲】

【請求項1】 群管理される枚葉式印刷機において、起倒自在な操作ボード(9)を排紙部(7)に設け、該操作ボード(9)にインキ供給量調整手段(10)を設けたことを特徴とするもの。

【発明の詳細な説明】

【0001】

【産業上の利用分野】本発明は、群管理される枚葉式印刷機の制御に関する。

【0002】

【発明の背景】枚葉式印刷機にあつては、用紙の見当、印刷圧力、紙寸に対応した機器の調整、そして、湿し水及びインキ供給量といった多数の管理項目が適切に制御されて始めて良好な印刷が行われる。従来にあつては、実開昭60-38741号公報及び特開昭63-230342号公報に示されるように、各個の印刷機に各々オペレーションスタンドが付設され、個別的上記の管理項目を制御していた。しかしながら、近時に至つては、コンピュータ制御技術の発達及びオペレータの負担軽減の要請に基づき、多数の印刷機を1台のコンピュータによって一元的に統括制御する、いわゆる群管理方式が採られるようになった。

【0003】このような印刷機の群管理は、前記したオペレータの負担軽減に大きく寄与するとともに、オペレーションスタンドが不要となるので工場スペースの節減にも大きな効果がある。

【0004】ところで、上記した枚葉式印刷機の管理項目のうちインキ供給量の調整については、印刷品質を最も大きく、かつ、直接的に左右するものであり、また、インキ供給量は多数のインキ帯域に分割して設定されるものであるから、最終的な微調整を、各々の印刷機によって刷り出された試刷と見比べつつ行いたいという要請がある。

【0005】

【発明が解決しようとする課題】本発明は、上記した問題に鑑みてなされ、進歩した枚葉式印刷機を提供するもので、その目的は、群管理される枚葉式印刷機のインキ供給量の最終的な微調整を各個の印刷機において簡便に行えるようにすることにある。

【0006】

【課題を解決するための手段】このために、本発明に係る枚葉式印刷機は、起倒自在な操作ボード(9)を排紙部(7)に設け、この操作ボード(9)にインキ供給量調整手段(10)を設けたことを特徴とする。

【0007】

【作用】これにより、必要時に操作ボード(9)を起こし、排紙部(7)において取り出された試刷(8)をこの操作ボード(9)上に載置して見比べつつ、個々の印刷機において簡便に、インキ帯域毎のインキ供給量の最終的な微調整を行うことができる。

【0008】

【実施例】以下、図面を参照して、本発明の実施例につき詳細に説明する。図1は、本発明に係る枚葉式印刷機の一実施例を示す概略側面図、図2は、要部を拡大した側面図、図3は、平面図、図4は、インキ供給量調整手段を摘示した平面図である。

【0009】図示された枚葉式印刷機は、大別して、用紙(1)をストリーム状に給送する給紙部(2)、インキ装置(3)から送り出されたインキを用紙(1)に印刷加圧する印刷ユニット(4)、そして、印刷済みの用紙(5)を紙積台(6)上にパイルする排紙部(7)から成る。

【0010】本発明は、このような枚葉式印刷機が多数台印刷工場に配置され、群管理方式によって一元的に統括制御されることを前提としている。すなわち、多数台の枚葉式印刷機は、従来の如く個別的にオペレーションスタンドによって制御されるのではなく、前述した多数の管理項目が1台のコンピュータによって集中的に制御されるのである。

【0011】しかしながら、多数の管理項目のうちインキ供給量の調整については、群管理のためのコンピュータによっていわば概略的に調整するだけでは不十分であり、分割された多数のインキ帯域毎に最終的な微調整を試刷(8)と対応させて行う必要がある。

【0012】そこで、本発明に係る枚葉式印刷機は、いわゆるハイパイル型の排紙部(7)に起倒自在な操作ボード(9)を設け、この操作ボード(9)にインキ供給量調整手段(10)を設けている。ハイパイル型の排紙部(7)には、チェーングリップ等の用紙搬送手段(11)を格納するためのケーシング(12)が存在するので、ここに平板状の操作ボード(9)の一端を適宜の軸やヒンジによってスイング自在に取り付け、エアーシリンダ等の位置決め手段(13)によってこの操作ボード(9)を任意の角度で起倒自在に支持している。すなわち、不使用時には、操作ボード(9)は垂直下方に倒されており、調整作業に必要な時にのみ、オペレータの所望する角度に起こされるようになされている。また、排紙部(7)において試刷(8)が取り出されるのは当然のことであるから、この試刷(8)を操作ボード(9)上に払げて、刷り上がりを詳細に観察することができる。

【0013】インキ供給量調整手段(10)の構造そのものは、前記した従来技術のものと同様であり、インキ装置(3)のインキブレード(14)が、分割された多数のインキ帯域毎にインキ供給量を調整するようになっているので、それに応じて、プッシュボタン(15)、(16)でインキ供給量を増減させるとともに、供給量の表示(17)が行われる。なお、インキ供給量調整手段(10)と、群管理のためのコンピュータ(図示していない。)と、そしてステッピングモータ等のブレード駆

3

4

動手段を有するインキ装置 (3) が電氣的に接続されることは、言うまでもない。

【0014】

【発明の効果】本発明に係る枚葉式印刷機によれば、排紙部 (7) において取り出された試刷 (8) と見比べつつ、個々の印刷機において簡便に、インキ帯域毎のインキ供給量の最終的微調整を行うことができるので、印刷品質の一層の向上と作業効率の著しい改善をもたらすことができるとともに、工場スペースの節減にも大きく資することができる。

【図面の簡単な説明】

【図 1】本発明に係る枚葉式印刷機の一実施例を示す概略側面図である。

【図 2】図 1 の要部を拡大した側面図である。

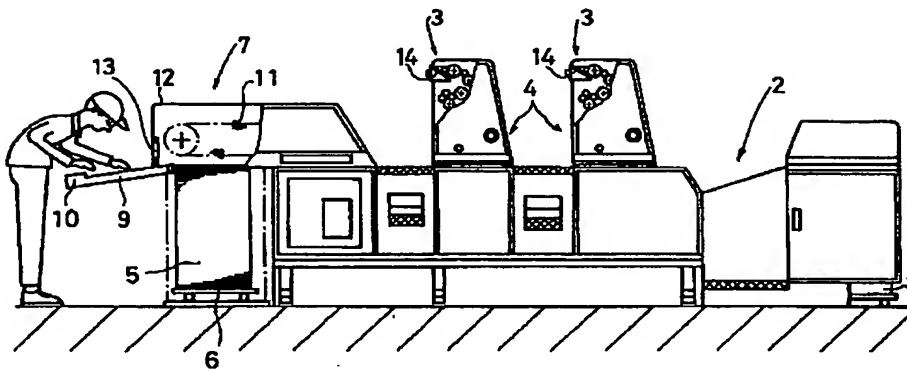
【図 3】図 1 の平面図である。

【図 4】インキ供給量調整手段を摘示した平面図である。

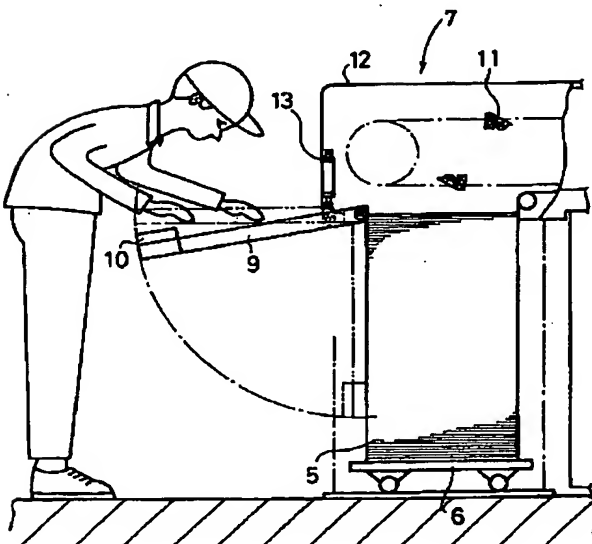
【符号の説明】

- | | | |
|----|---------|------------|
| 2 | 給紙部 | |
| 3 | インキ装置 | |
| 4 | 印刷ユニット | |
| 7 | 排紙部 | |
| 8 | 試刷 | |
| 9 | 操作ボード | |
| 10 | 10 | インキ供給量調整手段 |
| 12 | ケーシング | |
| 13 | 位置決め手段 | |
| 15 | プッシュボタン | |
| 16 | プッシュボタン | |

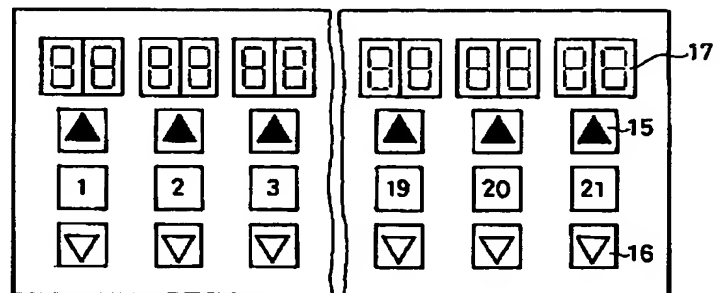
【図 1】



【図 2】

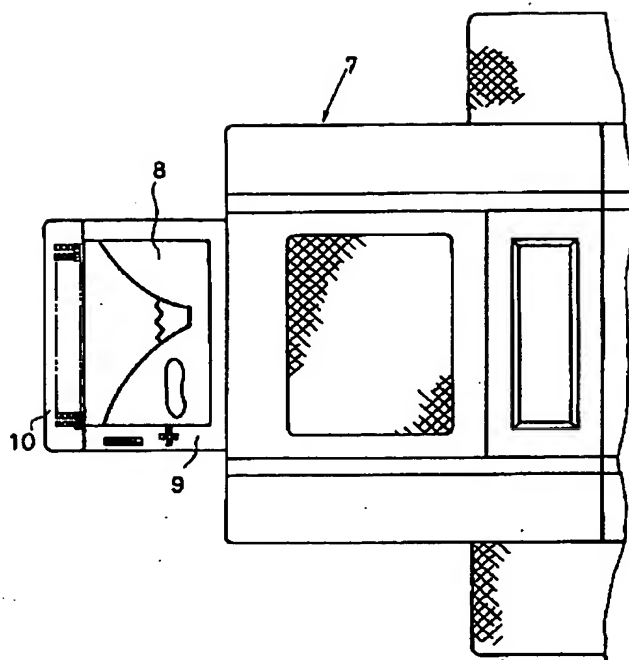


【図 4】



10

【図3】



PATENT ABSTRACTS OF JAPAN

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(71)Applicant : SHINOHARA TEKKOSHO:KK

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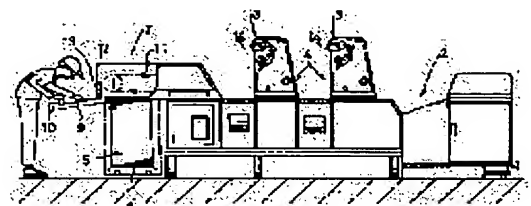
(72)Inventor : IWAMOTO MASAYUKI

(54) SHEET FEED PRESS

(57)Abstract:

PURPOSE: To easily perform final fine adjustment of the feeding amount of ink at each sheet-feed press controlled in a group.

CONSTITUTION: In sheet-feed presses controlled in a group, an operating board 9 which is freely laid up and down is provided in a paper discharge part 7. An adjusting means 10 for adjusting the feeding amount of ink is set in the operating board 9.



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CLAIMS

[Claim(s)]

[Claim 1] What is characterized by having prepared an actuation board (9) in which **** is free in a delivery unit (7), and forming an ink amount-of-supply adjustment means (10) in this actuation board (9) in a single-wafer-processing printing machine by which group control is carried out.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the control of a single-wafer-processing printing machine by which group control is carried out.

[0002]

[Background of the Invention] If it is in a single-wafer-processing printing machine, the management item of a large number, such as adjustment of the device corresponding to the aim of a form, a printing pressure, and ****, dampening water, and the ink amount of supply, is controlled appropriately, begins, and good printing is performed. If it was in the former, to be shown in JP,60-38741,U and JP,63-230342,A, the operation stand was respectively attached to each printing machine, and the above-mentioned management item was controlled individually. However, if it resulted in recently, based on the request of development computer control ****'s, and an operator's derating, the so-called group control method which carries out generalization control of many printing machines unitary by one computer came to be taken.

[0003] While the group control of such a printing machine contributes to an operator's above mentioned derating greatly, since an operation stand becomes unnecessary, there is a big effect also in reduction of a factory space.

[0004] By the way, about adjustment of the ink amount of supply, printing quality is influenced directly most greatly, and since the ink amount of supply is divided into many ink bands and it is set up, there is a request of wanting to perform it, comparing final fine adjustment with the trial print which began to be printed by each printing machine among the management items of the above-mentioned single-wafer-processing printing machine.

[0005]

[Problem(s) to be Solved by the Invention] This invention is made in view of the above-mentioned problem, the single-wafer-processing printing machine which progressed is offered, and the object is in enabling it to perform final fine adjustment of the ink amount of supply of a single-wafer-processing printing machine by which group control is carried out simple in each printing machine.

[0006]

[Means for Solving the Problem] For this reason, a single-wafer-processing printing machine concerning this invention is characterized by having prepared an actuation board (9) in which **** is free in a delivery unit (7), and forming an ink amount-of-supply adjustment means (10) in this actuation board (9).

[0007]

[Function] In each printing machine, final fine adjustment of the ink amount of supply for every ink band can be performed simple, laying the trial print (8) taken out in the lifting and the delivery unit (7) in the actuation board (9) at the time of the need on this actuation board (9), and comparing it by this.

[0008]

[Example] Hereafter, with reference to a drawing, it explains to details per example of this invention. It is the plan where the side elevation and drawing 3 to which the outline side elevation showing one example of the single-wafer-processing printing machine which drawing 1 requires for this invention, and drawing 2 expanded the important section indicated the plan, and drawing 4 indicated the ink amount-of-supply adjustment means.

[0009] The illustrated single-wafer-processing printing machine is divided roughly, and consists of the feed section (2) which feeds with a form (1) in the shape of a stream, the printing unit (4) which carries out printing application of pressure of the ink sent out from ink equipment (3) at a form (1), and the delivery unit (7) which carries out the pile of the form [finishing / printing] (5) on ***** (6).

[0010] This invention is premised on being arranged at a base printing factory and generalization control being carried out unitary by the group control method by many such single-wafer-processing printing machines. That is, the single-wafer-processing printing machine of an a large number base is not individually controlled by the operation stand like the former, but many management items mentioned above are intensively controlled by one computer.

[0011] However, just adjusting roughly so to speak is inadequate, and it is necessary to make final fine adjustment correspond with a trial print (8), and to perform it for every ink band of divided a large number, by computer for group control about adjustment of the ink amount of supply among many management items.

[0012] Then, the single-wafer-processing printing machine concerning this invention prepared the actuation board (9) in which **** is free in the so-called delivery unit (7) of a high pile type, and has formed the ink amount-of-supply adjustment means (10) in this actuation board (9). Yes, since casing (12) for storing form conveyance means

(11), such as a chain gripper, exists in the delivery unit (7) of a pile type, this actuation board (9) is supported for the end of a plate-like actuation board (9) free [****] at an angle of arbitration with positioning means (13), such as installation and a pneumatic cylinder, free [swing with a proper shaft or a proper hinge] here. That is, at the time of un-using it, the actuation board (9) is pushed down on the vertical lower part, and is made as [start / at the angle which is the need and for which a chisel and an operator ask by the way / by tuning]. Moreover, since it is natural, it can extend and print this trial print (8) on an actuation board (9) that a trial print (8) is taken out in a delivery unit (7), and it can observe a riser in details.

[0013] The structure of an ink amount-of-supply adjustment means (10) itself is the same as that of the thing of the above mentioned conventional technology, and since the ink blade (14) of ink equipment (3) adjusts the ink amount of supply for every ink band of divided a large number, while it makes the ink amount of supply fluctuate by the push button (15) and (16) according to it, the display (17) of the amount of supply is performed. In addition, it cannot be overemphasized that the ink equipment (3) which has an ink amount-of-supply adjustment means (10) and blade driving means, such as a computer for group control (not shown) and a stepping motor, is connected electrically.

[0014]

[Effect of the Invention] Since final fine adjustment of the ink amount of supply for every ink band can be performed simple in each printing machine, while being able to bring about a remarkable improvement of much more improvement in printing quality, and working efficiency, comparing with the trial print (8) taken out in the delivery unit (7) according to the single-wafer-processing printing machine concerning this invention, it can ** greatly also to reduction of a factory space.

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TECHNICAL FIELD

[Industrial Application] This invention relates to the control of a single-wafer-processing printing machine by which group control is carried out.

[0002]

[Background of the Invention] If it is in a single-wafer-processing printing machine, the management item of a large number, such as adjustment of the device corresponding to the aim of a form, a printing pressure, and ****, dampening water, and the ink amount of supply, is controlled appropriately, begins, and good printing is performed. If it was in the former, to be shown in JP,60-38741,U and JP,63-230342,A, the operation stand was respectively attached to each printing machine, and the above-mentioned management item was controlled individually. However, if it resulted in recently, based on the request of development computer control ****'s, and an operator's derating, the so-called group control method which carries out generalization control of many printing machines unitary by one computer came to be taken.

[0003] While the group control of such a printing machine contributes to an operator's above mentioned derating greatly, since an operation stand becomes unnecessary, there is a big effect also in reduction of a factory space.

[0004] By the way, about adjustment of the ink amount of supply, printing quality is influenced directly most greatly, and since the ink amount of supply is divided into many ink bands and it is set up, there is a request of wanting to perform it, comparing final fine adjustment with the trial print which began to be printed by each printing machine among the management items of the above-mentioned single-wafer-processing printing machine.

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EFFECT OF THE INVENTION

[Effect of the Invention] Since final fine adjustment of the ink amount of supply for every ink band can be performed simple in each printing machine, while being able to bring about a remarkable improvement of much more improvement in printing quality, and working efficiency, comparing with the trial print (8) taken out in the delivery unit (7) according to the single-wafer-processing printing machine concerning this invention, it can ** greatly also to reduction of a factory space.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] This invention is made in view of the above-mentioned problem, the single-wafer-processing printing machine which progressed is offered, and the object is in enabling it to perform final fine adjustment of the ink amount of supply of a single-wafer-processing printing machine by which group control is carried out simple in each printing machine.

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MEANS

[Means for Solving the Problem] For this reason, a single-wafer-processing printing machine concerning this invention is characterized by having prepared an actuation board (9) in which **** is free in a delivery unit (7), and forming an ink amount-of-supply adjustment means (10) in this actuation board (9).

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OPERATION

[Function] In each printing machine, final fine adjustment of the ink amount of supply for every ink band can be performed simple, laying the trial print (8) taken out in the lifting and the delivery unit (7) in the actuation board (9) at the time of the need on this actuation board (9), and comparing it by this.

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EXAMPLE

[Example] Next, the example of the ophthalmology photography equipment of this invention is explained based on a drawing.

[0014] Similarly the block diagram in which drawing 1 shows the important section of the ophthalmology photography equipment of this invention, and drawing 2 are [the side elevation of ophthalmology photography equipment and drawing 2 (B) of (A)] plans.

[0015] The housing 2 which A is ophthalmology photography equipment and was prepared in the upper surface of a pedestal 1 and a pedestal 1 possible [sliding displacement] in drawing 2 , it prepares in the jaw cradle [of the shape of an arch by which Bases 3a and 3a were fixed to the upper surface of a pedestal 1] 3, and transverse-plane, i.e., ** person, side of a housing 2 — having — sliding of a housing 2 — it has the joy stick 4 which operates displacement, and the display (monitor) 5 prepared in the transverse plane of a housing 2.

[0016] A housing 2 is displaced to the upper and lower sides (the direction of arrow head Y of drawing 2 (A)), and right and left (arrow head Z direction of drawing 2 (B)), before and after receiving the optometry I-ed (I') (the direction of arrow head X of drawing 2 (A)). sliding of the direction of X among this displacement, and a Z direction — displacement interlocks by actuation of a joy stick 4, and the displacement of the direction of Y interlocks by actuation of the dial which is not a drawing example, and a rise-and-fall switch, and is displaced.

[0017] And if the alignment actuation of a housing 2 to the optometry I-ed used as the right eye of the subject is completed for example, press actuation of photography carbon button 4a prepared in the joy stick 4 will be interlocked with, and a photograph will be taken. Moreover, completion of photography of predetermined number of sheets performs photography of examined the eyes I' used as the left eye of the subject.

[0018] In addition, also in one case of I' examined [I] the eyes, it is depending on the subject. Moreover, the photography sequence of right and left of the subject at the time of taking a photograph is not asked.

[0019] On the other hand, as shown in drawing 1 , after the frame memories m1, m2, and m3 as an end and a temporary storage means memorize, such the image pick-up of I' examined [I] the eyes after photography are set up so that it may be recorded on optical disk M as a record medium, where only a required static image is chosen as a ** person.

[0020] For example, when observing the optometry I-ed which is a right eye of the subject, the reflected light bunch of the from examined [this / I] the eyes is led to the image sensors 11, such as CCD, according to the optical system (not shown) established in the housing 2, and image display is carried out to a display 5 through a control unit 12.

[0021] While a ** person looks at the image (for example, eyegrounds image) displayed on the indicating equipment 5, it picturizes by press actuation of photography carbon button 4a, and according to the count of photography, the sequential storage of the static image examined [this / that was picturized / I] the eyes is carried out through a control unit 12 any of frame memories m1, m2, and m3 they are from an image sensor 11.

[0022] If the image of real time is displayed on Maine monitor 5a and the first photography is performed as shown in drawing 3 (A) when it is three temporary storage means of frame memories m1, m2, and m3 at a display 5 at this time, an image pick-up will be memorized by the frame memory m1.

[0023] As the image pick-up memorized by the frame memory m1 is shown in drawing 3 (B), it is displayed on submonitor 5b as a static image, and the image of real time, i.e., the image which should be memorized by the frame memory m2, is displayed on Maine monitor 5a.

[0024] Moreover, if the next photography is performed, an image pick-up will be memorized by the frame memory m2. As the image pick-up memorized by the frame memory m2 is shown in drawing 3 (C), it is displayed on submonitor 5b as a static image, the image of real time, i.e., the image which should be memorized by the frame memory m3, is displayed on Maine monitor 5a, and the image pick-up memorized by the frame memory m1 is displayed on submonitor 5c as a static image. In addition, after this 3rd photography is completed, the image of Maine monitor 5a turns into a static image.

[0025] A ** person observes each monitors 5a, 5b, and 5c by using as a static image the image pick-up memorized by frame memories m1, m2, and m3, and an unnecessary static image operates the elimination switch 13, and eliminates it from on frame memories m1 and m2 and m3 (for example, when an eyelash, an eyelid, etc. of the subject are reflected etc.).

[0026] And when photography examined [I] the eyes is completed and it changes to photography of examined the eyes I', namely, as shown in drawing 2 (B) If displacement of the housing 2 is carried out in the location shown with the chain line from the location shown in the continuous line or the subject changes to other subject The examined

the eyes detection means 14 detects this, a start signal is sent to the image recording circuit 15 through a control unit 12, and only a static image [memorizing among frame memories m1, m2, and m3] is automatically recorded on optical disk M through the image recording circuit 15.

[0027] At this time, as the detection method of the examined the eyes detection means 14, when photography changes to examined the eyes I' from the optometry I-ed, alignment actuation of the XYZ direction of a housing 2 is detected, and when the subject changes to other subject, exchange (not shown [both]) of a subject card, a nameplate, etc. which have the code which is inserted into a housing 2, and which was set up for every subject is detected.

[0028] And in completing the record processing to optical disk M and keeping a record condition for every subject examined [every] the eyes, it exchanges optical disk M for other things here.

[0029] By the way, although what arranged three frame memories m1, m2, and m3 as a temporary storage means was indicated in the above-mentioned example, especially the number of arrangement of a frame memory is not limited. Moreover, for example, a temporary storage means, such as using a videodisk, is not limited to a frame memory.

[Translation done.]

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- 2.*** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the outline side elevation showing one example of the single-wafer-processing printing machine concerning this invention.

[Drawing 2] It is the side elevation which expanded the important section of drawing 1 .

[Drawing 3] It is the plan of drawing 1 .

[Drawing 4] It is the plan which indicated the ink amount-of-supply adjustment means.

[Description of Notations]

2 Feed Section

3 Ink Equipment

4 Printing Unit

7 Delivery Unit

8 Trial Print

9 Actuation Board

10 Ink Amount-of-Supply Adjustment Means

12 Casing

13 Positioning Means

15 Push Button

16 Push Button

[Translation done.]

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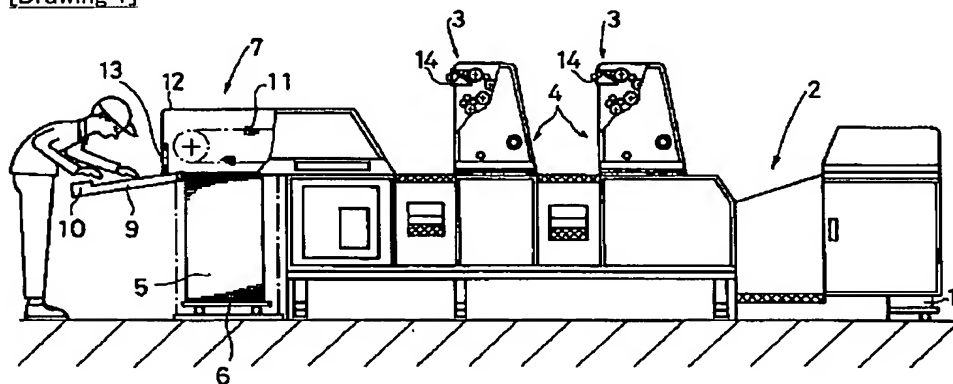
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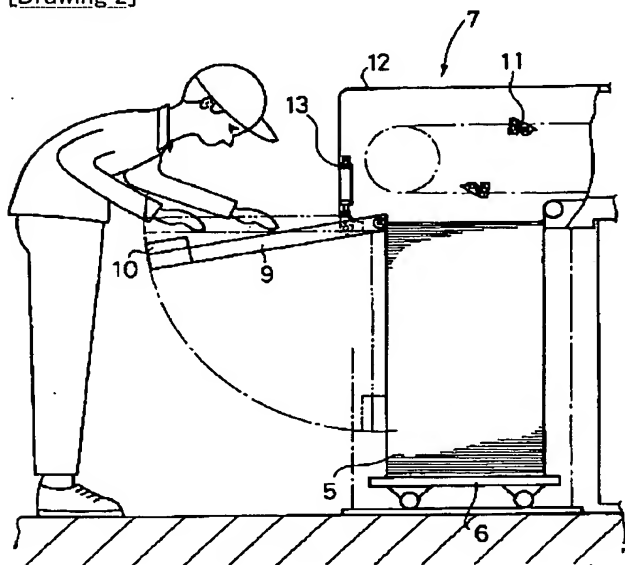
3.In the drawings, any words are not translated.

DRAWINGS

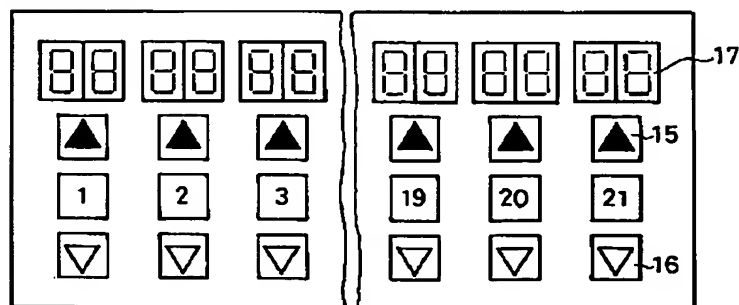
[Drawing 1]



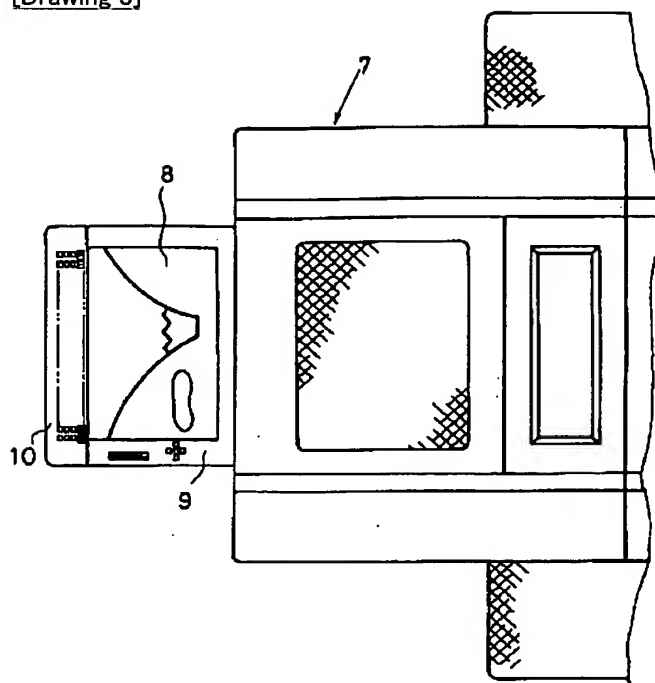
[Drawing 2]



[Drawing 4]



[Drawing 3]



[Translation done.]